

The Natural History of the Muck Islands, North Ebudes 10. Insecta: Diptera

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The following list details all the species of Diptera recorded during some 36 visits to the islands since work started in 1977. Methods of collecting include sweep-netting, ultra-violet light trapping, Tullgren funnel extraction of litter and pit-fall trapping. All months of the year, except October are represented.

Species names, with few exceptions are as in Kloet & Hincks' 1976 checklist. Syrphidae, however, follow the list of Stubbs & Falk, 1983. Some recent name changes, as noted in the Royal Entomological Society journal, *Antenna*, have also been incorporated. To facilitate comparisons, published records of the species listed here from other islands within the "Small Isles" group and from the Outer Hebrides are indicated. These came from the following sources: Canna - Bertram (1939); Eigg - Kevan (1940); Rum - Wormell (1982), Whiteley (1994); Outer Hebrides - Waterston (1981), Whiteley et al. (1994), Skidmore (in Whiteley, 1994), MacGowan (in Whiteley, 1994).

Place names are as in Dobson & Dobson (1985) and Dobson (1987). M = Muck; L = Lamb Island; H = Horse Island; Ea = Eagamol; C = Canna; E = Eigg; R = Rum; OH = Outer Hebrides, V.C 110; 37,38,47,48 = 10km National Grid square (NM). Months are indicated by Roman numerals but where records came from pitfall traps (which sometimes stood for several months) only the season is indicated.

Identifications were based on the literature and, where possible, by comparison with named specimens in the Hunterian Museum, Glasgow University. Assistance by specialists is indicated in the text. Species marked * were verified by dissection of the genitalia.

List of species

TIPULIDAE

**Prionocera turcica* (F.); M,H; 38,47; Central Lochan W., 2/ii/80; Horse Isl., 19/vi/87; not common; (OH).

Nephrotoma appendiculata (Pierre); M; 48; one at Gallanach, 13/vi/82; (OH).

**N. flavescens* (L.); M; 48; one at light. Gallanach, 29/vi/88.

**Tipula marmorata* Mg.; M; 47; few at light in swamp. mid-Muck, 9/ix/83; (OH).

T. pagana Mg.; M; 47; one at Port an t-Seilich, 13/xi/80

**T. rufina* Mg.; M; 47,48; uncommon; Beinn Airein, 2/viii/80; Gallanach, 23/v/86 (OH,R).

**T. varipennis* Mg.; H; 38; one, 24/vi/82; (OH,R).

T. scripta Mg.; M; 47; Central Wood traps, autumn '80; larva in Port Mor Wood, 27/v/86; Square Wood, 10/viii/92; (C,E,OH,R).

**T. lateralis* Mg.; M; 48; in N. Muck, 16/v/80; (OH).

T. oleracea L.; M,H; 38,47; common and widely distributed, v - ix; (E,OH, R).

T. paludosa Mg.; M; 48; near N. coast, vii - viii; (OH,R).

T. maxima Poda; one wing, Square Wood, 1978; (C).

Limonia mitis (Mg.) f. *affinis* (Schummel); M; 47; one in swamp near fank, 17/v/80; (OH,R).

Pedicia rivosae (L.); M; 47,48; at light Central Wood, 17/ix/79; swamp near Gallanach, 9/ix/83; (OH,R).

Limnophila ferruginea (Mg.); M; 48; one in swamp 11/vii/81 at Bagh; (C,OH,R).

L. fulvonervosa (Schummel); M; 37; common in Gleann Mhartein, 10/vii/81; (OH,R).

Gonomyia simplex Tonnier; M; 47; one at Central Lochan E. 12/vii/81; (R).

Erioptera gemina Tjeder; M; 47; common at Central Lochan E. 12/vii/81; (R).

PSYCHODIDAE

Pericoma nubila (Mg.); M; 37; on Iris at foot of Gleann Mhartein, 11/vii/81.

PTYCHOPTERIDAE

**Ptychoptera albimana* (F.); M; 47; two in swamp near Central Wood, 24/v/87; (OH).

CULICIDAE

Anopheles claviger (Mg.); M; 47; one in swamp near fank, 17/v/80.

CERATOPOGONIDAE

Culicoides impunctatus Goetghebuer; M,H; 38,47; Central Wood, 1/viii/80; Horse Isl., 19/vi/82; occasionally abundant; (OH,R).

CHIRONOMIDAE

**Macropelopia notata* (Mg.); M; 48; in swamp at Bagh, 11/vii/81; (OH).

**Procladius culiciformis* (L.); M; 48; in bay at Am Maol, 13/v/82; (Dr. P. Langton comments that this is the species of Edwards and Pinder, but as the genus *Procladius* is in need of revision, he has reservations as to this species which he has yet to rear. Until he has done this he does not know whether it is but a form of *choreus*).

**Arctopelopia griseipennis* (Wulp) (det. Langton); M; 47; swamp near fank, 17/v/81; Central Lochan E., 18/vii/81; (OH).

**Natarsia punctata* (F.); M; 47; by Central Lochan E., 12/vii/81.
 **Trissopelopia longimana* (Staeger); M; 47; in Central Wood, 14/vii/81.
 **Psectrocladius obvius* (Walker); M; 47; in swamp by fank, 17/v/80.
 **P. sordidellus* (Zetterstedt); M; 47; by Central Lochan E., 12/vii/81.
 **Camptochironomus pallidivittatus* (Malloch); several at Am Maol Lochan, 23/v/83.
 **Camptochironomus tentans* (F.); M; 47; by Central Lochan W., 16-18/vii/82.
 **Chironomus pseudothummi* Strenzke; M; 47; by Central Lochan E., 12/vii/81. (Langton comments that the identification is likely to be correct. Most of the *thummi* group are, however, so far unidentifiable as adults and there are more in Britain than are keyed by Pinder.)
 **Endochironomus impar* (Walker); M; 47; by Central Lochan W., 16-18/vii/82.
 **Micropsectra fusca* (Mg.); M; 47,48; adults emerging from pools on Am Maol, 16/ii/81; by Central Lochan E., 12/vii/81.
 **Paratanytarsus penicillatus* (Goetghebuer); M; 47; by Central Lochan E., 12/vii/81. (Det. Langton).

BIBIONIDAE

Bibio lanigerus Mg.; M; 47,48; Am Maol traps; south of Gallanach, 18/v/80.
B. lepidus Loew; M; 47; one on beach near Iron Age fort, S. Muck, 13/xi/80 (checked by E.G. Hancock); (R).
B. nigriventris Haliday; M; 47; swamps S. of Gallanach, 17-18/v/80; on birch, Pt. Mor. Wood, 26/viii/88; Central Wood traps v-vii/80; (R).
B. pomonae (F.); M; 47; in light trap, Wire Park Wood, 29/vii/80; (OH,R).
Dilophus febrilis (L.); M; 47; pair in cop. near fank, 24/v/83; on Hawthorn Central Wood, 21/v/85; (OH).
Dilophus femoratus Mg.; M,H; 38,47; south Horse Isl., 27/v/87; several on birch, Port Mor Wood, 26/v/88; (R,OH).

STRATIOMYIDAE

Beris vallata (Forster); M; 47; field edge, Cnoc na Curran, 14/vi/82.
Sargus splendens Mg.; M; 47; one in S. Muck, 23/vii/84; (R).

RHAGIONIDAE

Chrysopilus cristatus (F.); M; 47; few near Port an-t Seilich, 23/vii/84; Central Wood, 15/vii/85. (R,OH).
Rhagio lineola F.; M; 47,48; Square Wood, 1978; on Rowan, Central Wood, 1/viii/80; (R).
Rhagio scolopacea (L.); M; 37,47,48; common and widely distributed, v - vii; (OH,R).

TABANIDAE

Haematopota pluvialis (L.); M; 47; common, v - viii; (C,E,OH,R).

EMPIDIDAE

**Platypalpus minutus* (Mg.); M; 47; one in bracken near Gallanach, 19/vii/79; Cnoc na Curran, 1/viii/80; (OH).
 **P. pallidiventris* (Mg.); M; 47; one male in bracken, near Gallanach, 19/vii/79; (OH,R).

Bicellaria vana Collin; M; 47; one near Central Lochan E., 12/vii/81.

Empis punctata Mg.; M; 47; one by Central Lochan E., 12/vii/81.

E. trigramma Mg.; M; 47; Central Wood, 23/v/88; (E).

E. livida L.; M; 47,48; widely distributed, vii; (C,OH,R).

DOLICHOPODIDAE

Dolichopus atratus Mg.; M; 47; two in grass, Port Mor Wood, 18/vii/82; (R,OH).

D. plumipes (Scopoli); Ea,M; 38,47; common on Eagamol, 1/vii/86; on grass at Port Mor, 18/vii/82; (R,OH).

D. popularis Wiedemann; M; 47; in grass near Port Mor, 18/vii/82; (R,OH).

D. trivialis Haliday; M; 47,48; widely distributed, vi - vii; (OH).

D. ungulatus (L.); M; 47; in grass near Gallanach, 20/vii/79; (E,OH,R).

D. vitripennis Mg.; M; 47; one on bracken near Gallanach, 19/vii/79; (C,OH,R).

LONCHOPTERIDAE

Lonchoptera lutea Panzer; H,M; 38,47; common and widely distributed, 17-18/v/80; (OH,R).

SYRPHIDAE

Melanostoma mellinum (L.); M; 37,47,48; widely distributed, vii - viii; (C,E,OH,R).

M. scalare (F.); M; 47,48; widely distributed, v - vi; (OH,R).

Platycheirus albimanus (F.); M; 47; frequent, v - xi; (R,OH).

P. angustatus (Zetterstedt); M; 47; one female, 15/vii/82; (R,OH).

P. clypeatus (Mg.); H,M; 38,47,48; common and widely distributed, vi - vii; (C,E,OH,R).

P. manicatus (Mg.); M; 47,48; common and widely distributed, vi - vii; (C,E,OH,R).

Episyrrhus balteatus (Degeer); M; 47,48; widely distributed, vi - vii; (R,OH).

Leucozona lucorum (L.); M; 48; N. Muck, 18/v/80; (R).

Metasyrrhus corollae (F.); M; 38; one, N.E. Muck, 24/v/84; (R,OH).

**Sphaerophoria menthastri* (L.) sensu Vockeroth; H,M; 37,38; widely distributed, v - vii; (OH,R).

Syrphus ribesii (L.); M; 47; Central Wood, 1/viii/80; (C,OH,R).

Cheilosia illustrata (Harris); M; 47; near Gallanach, 1/viii/80 & 15/vi/82; (C,OH).

Rhingia campestris Mg.; M; 47; widely distributed, vi - viii; (C,OH,R).

Chrysogaster hirtella Loew; M; 37,47,48; common and widely distributed, vi - vii; (C,E,OH,R).

Lejogaster metallina (F.); M; 47; one male, Port Mor, 17/vi/82; (R,OH).

Neoascia tenur (Harris); H,M; 38,47; common and widely distributed, v - vii; (OH,R).

Eristalinus aeneus (Scopoli); M; 38,48; one over rocks off Lamb Island, 20/v/85; (OH).

Eristalis arbustorum (L.); M; 47; in Central Muck, v - vi; (R,OH).

E. horticola (Degeer); M; 47; common, widely distributed; v - vii; (C,E,OH).

E. intricarius (L.); M; 47,48; common, widely distributed; v - vii; (E,OH,R).

E. nemorum (L.); M; 47; one near Gallanach, 10/vii/89; (R).

E. pertinax (Scopoli); M; 47; common in Central Muck, v - vii; (OH,R).

Helophilus pendulus (L.); M; 47,48; widely distributed in v; (E,OH,R).

Sericomyia silentis (Harris); M; 47,48; common, widely distributed, v - ix; (C,E,OH,R).

Syritta pipiens (L.); M; 47,48; widely distributed, vi - ix; (OH).

TEPHRITIDAE

Xyphosia miliaria (Schrink); M; 47; by sweeping grass etc., near Gallanach, 20/vii/79; (R).

OTITIDAE

**Herina frondescens* (L.); M; 37; Gleann Mharteinn, 10/vii/81; (C,OH,R).

COELOPIDAE

Coelopa frigida (F.); H,M; 38,47; mainly on shore, vii - viii; (C,E,OH,R).

HELEOMYZIDAE

Suillia notata (Loew) var. *hilaris* (Zetterstedt); M; 48; abundant at Gallanach, '78; (OH,R).

SEPSIDAE

**Themira annulipes* (Mg.); M; 47; near Gallanach, 19/vii/79; (C,OH).

**Sepsis cynipsea* (L.); M; 47; near Gallanach, 19/vii/79 & 10/vii/81; (C,E,OH,R).

S. flavimana Mg.; M; 47; field near Wire Park Wood; 9 & 10/vii/81; (OH).

**S. neocynipsea* Melander & Spuler; M; 47; on bracken, Rock Park Wood; 19/vii/79.

S. orthocnemis Frey; M; 47; one near Wire Park Wood, 9/vii/81; (det. Pont); (OH).

SCIOMYZIDAE

Knutsonia albiseta (Scopoli); M; 47; occasional by Central Lochan E.; (OH).

SPHAEROERCIDAE

Sphaerocera denticulata (Mg.); M; 47; widespread; v - ix.

Crumomyia nitida (Mg.); M; 47; Rock Park Wood, -xi/83; numerous in Am Maol traps, winter 83/84.

OPOMYZIDAE

Geomyza tripunctata Fallén; M; 47; field edge S. of Gallanach, 18/v/80; (OH,R).

**Opomyza germinationis* (L.); M; 47; few near Gallanach, 19/vii/79; (C,OH,R).

CALLIPHORIDAE

Calliphora uralensis Villeneuve; M; 47; on carrion, Camas Mor, -vii/78; (OH).

C. vicina Robineau-Desvoidy; M; 47,48; in building, Port Mor, 17/xi/80; Am Maol, 16/ii/81; (C,E,OH,R).

**Lucilia caesar* (L.); M; 47,48; abundant and widely distributed; v - vii; (C,E,R,OH).

L. sericata (Mg.); M; 47; on carrion, Camas Mor, -vii/78; (C,E,OH).

Protophormia terraenovae Robineau-Desvoidy; M; 47; Port Mor 24/vi/82.

SCATHOPHAGIDAE

Pogonota barbata (Zetterstedt); M; 47; several by Central Lochan W., 16-18/vii/82.

Scathophaga furcata (Say); M; 47; one, 13/ii/81; (OH,R).

**S. litorea* Fallén; M; 47,48; widely distributed, active even in xi - ii; (C,OH,R).

S. stercoraria (L.); M; 47;48; common and widely distributed, ii - xi; (C,E,OH,R).

MUSCIDAE

Morellia hortorum (Fallén); M; 47; common and widely distributed, v -vii; (C,OH,R).

Drymeia hamata (Fallén); M; 47; occasional, v - vii; (R,OH).

Hydrotaea irritans (Fallén); M; 47; common and widely distributed, vi - viii; (C,E,OH,R).

Phaonia rufipalpis Macquart; M; 47; Central Wood traps summer '80.

Helina intermedia (Villeneuve); M; 47; in heather, 25/ix/80.

H. laetifica (Robineau-Desvoidy); M; 47; Gleann Mhartein traps, summer '80; (OH,R).

H. obscurata (Mg.); M; 47; near Gallanach, 19/vii/79; Gleann Mhartein traps summer-autumn '80. & near Gallanach, vii - ix; (OH).

Graphomya maculata (Scopoli); M; 47,48; by Central Lochan E., 5/viii/82; on carrion, near Gallanach, 24/v/83; (R,OH).

Discussion

The above list, of some 116 species, is clearly very incomplete but is comparable to other preliminary lists of Diptera from the Small Isles group, e.g. from Canna (Bertram, 1939) - 108 species, from Eigg (Kevan, 1940) - 81 species and from the much larger and more varied Rum (pre Steele & Woodroffe, 1969) - 259 species. The numbers, however, fall far short of those listed for Rum by Wormell (1982) - 550 confirmed species and the 108 additions noted by Whiteley (1994).

Many of the species recorded here were encountered repeatedly during the field work and comparatively few specimens in the collections could not be recognised so that the list probably fairly represents what might be reasonably achieved in the time available by a non-specialist worker using general collecting methods and recording all groups of insects at the same time.

Certain groups such as the Syrphidae, Scathophagidae and other conspicuous flies have probably been recorded fairly fully whereas more "specialist" groups such as Cecidomyidae and Agromyzidae have not been noted at all. The Ceratopogonidae are almost certainly under-recorded although the biting midges, unlike those in Rum, do not dominate the insect fauna. Muck is largely wind-swept and, although midges can be troublesome on sultry calm days in summer, they are only a minor problem. The author and his family have camped

for many weeks on the island without inconvenience. Much more irritation was caused by the non-biting "Head Fly", *Hydrotaea irritans*.

It was surprising that only one species of Tabanidae was encountered because *Haematopota pluvialis* was quite common. It may be noted that this was also the only species noted on Canna by Bertram (1939).

The present list should, therefore, be regarded as preliminary and clearly there is much scope for specialist recording on this, largely unworked, island group.

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